

ALKALINE BATTERY WITH FLAT HOUSING

ABSTRACT OF THE DISCLOSURE

A flat elongated alkaline battery comprising an outer metal housing and plurality of individual alkaline cells housed therein. The outer housing has at least a major surface which is a flat polygon. Preferably the outer metal housing is a cuboid. The individual cells comprise an anode slab comprising zinc, cathode slab, comprising manganese dioxide and separator therebetween. Each cell is formed by stacking the anode, separator, and cathode body to body. Each cell has at least one surface which is polygonal. The individual cells are preferably aligned in a row edge to edge to form a pack of cells having the same thickness as the thickness of an individual cell. The pack of cells are inserted into a common hydrogen permeable plastic container and encased therein. The cells encased in the plastic container are housed within the interior of the metal outer casing. The cells are electrically connected in parallel to the battery positive and negative terminals. In an alternative embodiment the flat elongated alkaline battery comprises only a single alkaline cell encased within a hydrogen permeable plastic container which is housed within the interior of a metal housing. The outer metal housing is preferably a cuboid.